



PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM	Books
Search	PubMed	<input type="text"/>	for	<input type="text"/>	Go	Clear		
<input checked="" type="checkbox"/> Limits		Preview/Index		History	Clipboard	Details		
Display	Abstract	<input type="text"/>	Sort	<input type="text"/>	Save	Text	Clip Add	Order

Entrez  
PubMed

1: Plant Mol Biol 1996 Feb;30(3):647-53

Related Articles, [NEW](#) Links**Molecular cloning of a cDNA encoding diacylglycerol kinase (DGK) in *Arabidopsis thaliana*.****Katagiri T, Mizoguchi T, Shinozaki K.**PubMed  
Services

Laboratory of Plant Molecular Biology, Institute of Physical and Chemical Research (RIKEN), Tsukuba Life Science Center, Inaraki 305, Japan.

Related  
Resources

Diacylglycerol kinase (DGK) synthesizes phosphatidic acid from diacylglycerol, an activator of protein kinase C (PKC), to resynthesize phosphatidylinositols. The structure of DGK has not been characterized in plants. We report the cloning of a cDNA, cATDGK1, encoding DGK from *Arabidopsis thaliana*. The cATDGK1 CDNA contains an open reading frame of 2184 bp, and encodes a putative protein of 728 amino acids with a predicted molecular mass of 79.4 kDa. The deduced ATDGK1 amino acid sequence exhibits significant similarity to that of rat, pig, and *Drosophila* DGKs. The ATDGK1 mRNA was detected in roots, shoots, and leaves. Southern blot analysis suggests that the ATDGK1 gene is a single-copy gene. The existence of DGK as well as phospholipase C suggests the existence of PKC in plants.

PMID: 8605313 [PubMed - indexed for MEDLINE]

Display	Abstract	<input type="text"/>	Sort	<input type="text"/>	Save	Text	Clip Add	Order
---------	----------	----------------------	------	----------------------	------	------	----------	-------

[Write to the Help Desk](#)  
[NCBI](#) | [NLM](#) | [NIH](#)  
[Department of Health & Human Services](#)  
[Freedom of Information Act](#) | [Disclaimer](#)